DEPARTMENT OF TRANSPORTATION
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Sacramento, CA 95816

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October 19, 2001

04-CC,Sol-680,780-39.4/41.0(680),
L0.0/R1.3(680),1.1/2.3(780)
04-006064
ACIM-680-1(054)56N

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in SOLANO AND CONTRA COSTA COUNTIES IN BENICIA AND MARTINEZ ON ROUTE 680 FROM MOCOCO OVERHEAD TO BAYSHORE ROAD AND ON ROUTE 780 FROM ROUTE 680 TO EAST FIFTH STREET.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on October 30, 2001.

This addendum is being issued to revise the Project Plans, the Notice to Contractors and Special Provisions, the Proposal and Contract, and the Federal Minimum Wages with Modification Numbers 10 and 12 dated 9/28/01 and 10/12/01. A copy of the modified wage rates are available for the contractor's use on the Internet Site:

http://www.dot.ca.gov/hq/esc/oe/weekly_ads/addendum_page.html

Project Plan Sheets 3, 6, 15, 16, 42, 43, 44, 45, 46, 47, 48, 50, 61, 62, 122, 140, 160, 166, 180, 205, 212, 230, 231, 232, 233, 234, 235, 236, 266, 267, 276, 282, 294, 331, 335, 337, 338, 342, 343, 412, 490, 513, 544, 547, 548, 549, 550, 551, 597, 625, 632, 633, 634, 635, 636, 637, 709, 725, 728, 784, 785, 786 and 787 are revised. Half-sized copies of the revised sheets are attached for substitution for the like-numbered sheets.

Project Plan Sheet 481 is revised as follows:

The quantity for "BRIDGE DECK DRAINAGE SYSTEM" is revised to 10,000 kg.

Project Plan Sheet 544 is revised as follows:

The quantity for "STRUCTURE EXCAVATION (TYPE D-LDR)" is revised to 80 m3.
The quantity for "STRUCTURE EXCAVATION (TYPE D) (HAZARDOUS)" is revised to 725 m3.

In the Special Provisions, Section 4, "BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES," the third paragraph is revised to read as follows:

"The work shall be diligently prosecuted to completion before the expiration of **680 WORKING DAYS** beginning on the fifteenth calendar day after approval of the contract."

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In the Special Provisions, Section 5-1.01, "PLANS AND WORKING DRAWINGS," is revised to read as follows:

"When the specifications require working drawings to be submitted to the Engineer, the drawings shall be submitted to: Office of Resident Engineer, 4585 Pacheco Blvd., Suite 200, Martinez, CA 94553."

In the Special Provisions, Section 5-1.17, "PERMITS AND LICENSES," the second paragraph is revised to read as follows:

"The Department has obtained the following permits for this project:

A. USCG Bridge permit No. 2-01-11
B. BCDC permit No. 17-99 (M)
C. RWCQB File No. 2128.03
D. U.S. Army Corps of Engineer-File No. 21392N"

In the Special Provisions, Section 5-1.175, "ORDNANCE AND EXPLOSIVES," is added as attached.

In the Special Provisions, Section 5-1.30, "ENVIRONMENTAL WORK RESTRICTIONS," is added as attached.

In the Special Provisions, Section 9, "DESCRIPTION OF BRIDGE WORK," is revised as attached.

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the third paragraph is revised to read as follows:

"Constructing frames 3 and 4 at EB 780/680 Connector, Bridge No. 23-0211G, shall be the first order of work."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the following paragraphs are added after the third paragraph:

"The work consisting of constructing Frame 2 superstructure falsework for the Benicia Martinez Approach Structure, Bridge No. 23-215R, and Northbound 680 / Westbound 780 Connector & OH, Bridge No. 23-212G, shall not begin prior to 385 working days from the fifteenth calendar day after the approval of contract.

The work consisting of electrical work on the Main Span, Bridge No. 28-153R, shall not begin prior to 630 working days from the fifteenth calendar day after the approval of contract."

In the Special Provisions, Section 10-1.02, "ENVIRONMENTALLY SENSITIVE AREA (GENERAL)," the first sentence of the second paragraph is revised to read as follows:

"Within the boundaries of an ESA, no project related activities shall take place except on the allowable area where permits were obtained."

In the Special Provisions, Section 10-1.04, "WATER POLLUTION CONTROL (STORM WATER POLLUTION PREVENTION PLAN)," is revised as attached.

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In the Special Provisions, Section 10-1.10, "TEMPORARY FENCE (TYPE ESA)," the second paragraph is revised to read as follows:

"Temporary fence (Type ESA) shall be constructed as shown on the plans prior to any access, and clearing and grubbing work to enclose all the foliage canopy and not to encroach upon visible roots of the plants."

In the Special Provisions, Section 10-1.16, "ELECTRONIC MOBILE DAILY DIARY SYSTEM DATA DELIVERY," the section heading is revised to read as follows:

"**10-1.16 ELECTRONIC MOBILE DAILY DIARY COMPUTER SYSTEM DATA DELIVERY**"

In the Special Provisions, Section 10-1.18, "PROGRESS SCHEDULE (CRITICAL PATH METHOD)," subsection "EQUIPMENT AND SOFTWARE," items A, B, and E in the first paragraph are revised to read as follows:

"A. Complete computer system, including keyboard, mouse, 21-inch color SVGA monitor (1024x768 pixels, Intel Pentium III 850 MHz microprocessor, or equivalent;

B. Computer operating system software, compatible with the selected processing unit, for NT 4.0 or later equivalent;

E. A color-ink-jet printer with a minimum 36 megabyte RAM, capable of 600 dots per inch color, 1200 dots per inch monochrome, or equivalent, capable of printing fully legible, time scaled charts, and network diagrams, in four colors, with a minimum size of 36 inches by 48 inches (E size) and is compatible with the selected system, an HP Design Jet 1055 CM or equivalent, plotter stand, roll paper assembly and automatic paper cutter, and provide plotter paper and ink cartridges throughout the contract;"

In the Special Provisions, Section 10-1.21, "MOBILIZATION," is completely revised as attached.

In the Special Provisions, Section 10-1.24, "MAINTAINING TRAFFIC," the following paragraph is added after the second paragraph:

"The Contractor shall obtain a City of Benicia Encroachment Permit for the installation of the required traffic control devices on the city streets."

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In the Special Provisions, Section 10-1.24, "MAINTAINING TRAFFIC," in the fourth paragraph, the falsework opening table shown below is added:

Park Road UC
(Bridge No. 23-226R)

	Number	Width	Height
Vehicle Openings	1	6	4.6
	Location	Spacing	
Falsework Pavement Lighting	R	7	

(Width and Height in meters)
(R = Right side of traffic. L = Left side of traffic)
(C = Centered overhead)

In the Special Provisions, Section 10-1.24, "MAINTAINING TRAFFIC," the second item of the ninth paragraph is revised to read as follows:

"Hospital Road – No lane closure on Wednesday, Saturday, Sunday and Holidays between 8:00 a.m. and 4:00 p.m."

In the Special Provisions, Section 10-1.28, "PORTABLE CHANGEABLE MESSAGE SIGN," the first paragraph is revised to read as follows:

"Portable changeable message signs shall be furnished, placed, operated, and maintained for detours at those locations shown on the plans or at all construction related needs where designated by the Engineer in conformance with the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications and these special provisions."

In the Special Provisions, Section 10-1.28, "PORTABLE CHANGEABLE MESSAGE SIGN," the fourth paragraph is revised to read as follows:

"Full compensation for placement, operation, maintaining and removal of portable changeable message signs for public awareness information purposes and uses as directed by the Engineer shall be considered included in the contract unit price paid for portable changeable message sign and no additional payment will be made therefor."

In the Special Provisions, Section 10-1.295, "TEMPORARY SHORING," is added as attached.

In the Special Provisions, Section 10-1.32, "EXISTING HIGHWAY FACILITIES," subsection "BRIDGE REMOVAL," the second paragraph is revised to read as follows:

"Portion of the existing wing wall shall be removed to the limits shown on the plans.

West Arsenal Undercrossing, bridge number 23-127L, Bridge Removal (Portion), Location B."

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In the Special Provisions, Section 10-1.32, "EXISTING HIGHWAY FACILITIES," subsection "BRIDGE REMOVAL," the sixth paragraph is revised to read as follows:

"The following additional requirements apply to the removal of portions of bridges whenever the removal work is to be performed over public traffic and over the existing Exxon pipe lines at West Arsenal Undercrossing, bridge number 23-127L:"

In the Special Provisions, Section 10-1.495, "TEST BORINGS," is added as attached.

In the Special Provisions, Section 10-3.06, "CONDUIT," the first and second paragraphs are revised to read as follows:

"Conduit to be installed shall be Type 1 unless otherwise specified.
Conduit sizes shown on the plans and specified in the Standard Specifications and these special provisions are referenced to metallic type conduit."

In the Special Provisions, Section 10-3.06, "CONDUIT," the third paragraph is deleted.

In the Special Provisions, Section 10-3.06, "CONDUIT," the following paragraph is added after the ninth paragraph:

"Prior to wire installation all underground and conduits installed in structures (whether new or existing) shall be cleaned with a mandrel, cylindrical wire brush and blown out with compressed air witnessed and verified by the inspector. The mandrel shall not fill less than 85% of the conduit size. The cylindrical wire brush shall be sized accordingly to brush the full 360^0. Submit for approval all mandrels and brushes that the contractor intends to use with the appropriate data (i.e., MFG, conduit size to be used, etc.). Contractor shall notify the Engineer for the cleaning, mandreling and wire installation."

In the Special Provisions, Section 10-3.22, "FIBER COMMUNICATION CABLE AND ACCESSORIES," subsection "CABLE INSTALLATION," the following paragraph is added after the last paragraph:

"Prior to any cable installation, the Contractor shall submit for review by the Engineer detailed installation procedures for the Fiber Optic Cable. The submittal shall include the cable manufacturer's installation procedure, pulling lubricant recommended by the fiber optic manufacturer (with lubricant data back up, tension measuring device with recent calibration data) and any other mechanical aids being used."

In the Special Provisions, Section 13-1.01, "GENERAL," subsection "RAILROAD REQUIREMENTS," the subsection heading and first paragraph are revised as follows:

"**13-1.02 RAILROAD REQUIREMENTS.** The contractor shall notify Manager Industry and Public Projects, 10031 Foothills Blvd., Roseville, CA 95678, Telephone (916) 789-6334 and the Engineer, in writing at least ten (10) working days before performing any work on, or adjacent to the property or tracks of the Railroad."

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In the Special Provisions, Section 13-1.02, "RAILROAD REQUIREMENTS," the following paragraphs are added after the third paragraph:

"The Contractor will be allowed to closed the railroad tracks for bridge related works within the closure windows of 3-hours from 10:00 p.m. Sunday to 1:00 a.m. Monday. Additional closure windows may be available, however the contractor must submit a closure schedule to the Railroad six (6) weeks prior to begin closure works for review and approval. No additional closure will be allowed without prior approval from the Railroad.

Any delay caused by the contractor to reopen the Railroad tracks to any rail traffic is subject to fine of $1,000 per minute or at the discretion of the Railroad."

In the Special Provisions, Section 13-1.02, "RAILROAD REQUIREMENTS," the first sentence of the thirteenth paragraph is revised to read as follows:

"Four sets of plans, in 11" x 17" format with English and Metric units, and two sets of calculations showing details f construction affecting the Railroad's tracks and property not included in the contract plans, including but not limited to shoring and falsework, shall be submitted to the Engineer for review prior to submittal to Railroad for final approval."

In the Special Provisions, Section 13-1.03, "PROTECTION OF RAILROAD FACILITIES," the second sentence of the first paragraph is revised to read as follows:

"Said notice shall be made to Manager Industry and Public Projects of Railroad at (916) 789-6334."

In the Special Provisions, Section 13-1.03, "PROTECTION OF RAILROAD FACILITIES," the second paragraph is revised to read as follows:

"(2) The cost of flagging and inspection provided by Railroad during the period of constructing that portion of the project located on or near Railroad property, as deemed necessary for the protection of Railroad's facilities and trains, will be borne by the State for a period of 680 working days beginning on the date work commences on or near property of Railroad. The Contractor shall pay to the State liquidated damages in the sum of $500 per day for each day in excess of the above 680 working days the Contractor works on or near Railroad property, and which requires flagging protection of Railroad's facilities and trains."

In the Special Provisions, Section 13-1.03, "PROTECTION OF RAILROAD FACILITIES," the fourth sentence of the third paragraph is revised to read as follows:

"Contractor to provide a temporary fence 6’ high or combination of 32” K-rail and 4’ high fence on top of K-rail on both sides of Railroad tracks on the field side from interchange 680 to 780 and extend past the structure at least 50’."

In the Special Provisions, Section 13-1.03, "PROTECTION OF RAILROAD FACILITIES," the eighth sentence of the third paragraph is revised to read as follows:

"In the event that the stop signs are not being observed, the Contractor will at his own cost be required by Railroad to install and maintain crossing protection and provide Contractor flagmen."

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In the Special Provisions, Section 13-1.03, "PROTECTION OF RAILROAD FACILITIES," the first sentence of the fourth paragraph is revised to read as follows:

"Excavations at Bents 21 of bridges 23-125R and 23-212G located between the proposed columns and the Railroad shall be protected if greater than three (3) feet in depth."

In the Special Provisions, Section 13-2, "RAILROAD PROTECTIVE INSURANCE," the Railroad representative in the fourth paragraph is revised to read as follows:

"Manager Industry & Public Projects
Union Pacific Railroad Company
10031 Foothills Boulevard
Roseville, CA 95678
(916) 789-6334"

In the Proposal and Contract, the Engineer's Estimate Items 32, 33, 34, 35, 36, 56, 68, 69, 100, 103, 108, 126, 127, 136, 140, 149, 213, 215, 217 and 221 are revised, Items 311 and 312 are added and Item 310 is deleted as attached.

To Proposal and Contract book holders:

Replace pages 4, 5, 6, 7, 8, 9, 10, 13, 14, and 18 of the Engineer's Estimate in the Proposal with the attached revised pages 4, 5, 6, 7, 8, 9, 10, 13, 14 and 18 of the Engineer's Estimate. The revised Engineer's Estimate is to be used in the bid.

Attached is a copy of the supplemental Material Information Handout on Compact Disc.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the proposal.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it.

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

REBECCA D. HARNAGEL, Chief
Office of Plans, Specifications & Estimates
Office Engineer

Attachments

5-1.175 ORDNANCE AND EXPLOSIVES

The limits of this project fall within the boundary of the Former Benicia Arsenal. Ordnance and explosives (OE) have been found by the United States Army Corps of Engineers adjacent to the work area. Before beginning any activities at the site, all workers shall be trained to identify ordnance and explosives and implement proper safety protocols regarding any potential OE found within the work area. The Department will supply three 2-hour training sessions for the Contractor and subcontractors representatives within six months of contract award. The training will be completed in one session. Full compensation for the wages and expenses of the Contractor's and subcontractor's forces, including travel costs, shall be considered as included in the contract price paid for the various items of work and no additional compensation will be allowed therefor. The Contractor shall be responsible for any additional training of Contractor or subcontractor representatives and workers employed during the length of the contract.

In the event that potential OE is discovered, the Contractor shall immediately stop work and control access to that location. The Engineer shall be informed of the potential OE as soon as possible. OE specialists may be used by the Engineer to ensure the proper safety protocol is used to handle the material. The Contractor may continue work in unaffected areas.

If delay of work in the area delays the current controlling operation, the delay will be considered a right of way delay and the Contractor will be compensated for the delay in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

5-1.30 ENVIRONMENTAL WORK RESTRICTIONS

The Contractor's attention is directed to the existence of environmental restrictions that require special precautions be taken by the Contractor to protect the species listed below. It is the Contractor's responsibility to keep informed of all State and Federal Laws.

The contractor shall comply with the California Endangered Species Act and Federal Act.

SPECIES OF CONCERN ARE AS FOLLOWS:

Winter-run Chinook Salmon, Delta Smelt, Steelhead Trout, Spring-run Chinook Salmon, Coho Salmon, Sacramento Split tail.

All work in the waters of the Carquinez Strait less than 3 meters deep, as measured from the mean lower low water line, shall be limited to the period of December 1, 2001 to March 31, 2002 and for the remaining portion of the contract schedule will be from July 1 through October 31. Work in a water surrounded area (where the water depth is less than 3m) that is fully contained within an earlier constructed cofferdam and is accessed via the Contractor's access trestle may be done during the restricted time period provided there is no disturbance whatsoever to the area outside the cofferdam.

SECTION 9. DESCRIPTION OF BRIDGE WORK

The bridge work consists, in general, of widening an existing bridge, constructing five new bridges and nine retaining walls as follows:

WEST ARSENAL UC (WIDENING)
(Bridge No. 23- 0127L)

PARK ROAD UNDERCROSSING
(Bridge No. 23-0226R)

EB 780 / NB 680 CONNECTOR
(Bridge No. 23-0211G)

NB 680 / WB 780 CONNECTOR & OH
(Bridge No. 23-0212G)

NB 680 / WB 780 CONNECTOR
(Bridge No. 23-0214G)

BENICIA – MARTINEZ APPROACH STRUCTURE
(Bridge No. 23-0215R)

MSE RETAINING WALL NO. 1
(Bridge No. 23-0224)

RETAINING WALL NO. 2

RETAINING WALL NO. 3

MSE RETAINING WALL NO. 4
(Bridge No. 23-0225)

RETAINING WALL NO. 5

RETAINING WALL NO. 6

RETAINING WALL NO. 7

RETAINING WALL NO. 8

RETAINING WALL NB 20

10-1.04 WATER POLLUTION CONTROL (STORM WATER POLLUTION PREVENTION PLAN)

Water pollution control work shall conform to the provisions in Section 7-1.01G, "Water Pollution," of the Standard Specifications and these special provisions.

This project lies within the boundaries of the San Francisco Bay Regional Water Quality Control Board and shall conform to the requirements of the National Pollutant Discharge Elimination System (NPDES) Permit for General Construction Activities No. CAS000002, Order No. 99-08-DWQ, including State Water Resources Control Board (SWRCB) Resolution No. 2001-046, and the NPDES Permit for the State of California Department of Transportation Properties, Facilities, and Activities, No. CAS000003, Order No. 99-06-DWQ issued by the SWRCB. These permits, hereafter referred to as the "Permits," regulate storm water discharges associated with construction activities.

Water pollution control work shall conform to the requirements in the "Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual" and the "Construction Site Best Management Practices (BMPs) Manual," and addenda thereto issued up to, and including, the date of advertisement of the project, hereafter referred to respectively as the "Preparation Manual" and the "Construction Site BMP Manual" and collectively as the "Manuals." In addition, water pollution control work shall conform to the requirements in the Sampling and Analysis Bulletin. Copies of the Manuals and the Permits may be obtained from the Department of Transportation, Material Operations Branch, Publication Distribution Unit, 1900 Royal Oaks Drive, Sacramento, California 95815, Telephone: (916) 445-3520. Copies of the Manuals and the Sampling and Analysis Bulletin may also be obtained from the Department's Internet Web Site at: http://www.dot.ca.gov/hq/construc/stormwater.html.

In addition, a Conceptual Storm Water Pollution Prevention Plan (CSWPPP) has been prepared for this project by the Department and is available for review at the office of the Duty Senior, 111 Grand Avenue, Oakland, CA 94612, email; duty_senior_district04@dot.ca.gov, telephone number; (510) 286-5209, fax number; (510) 286-4563. This document may be used by the Contractor for developing the actual contract Storm Water Pollution Prevention Plan (SWPPP).

The Contractor shall know and fully comply with the applicable provisions of the Manuals, Permits, and Federal, State, and local regulations that govern the Contractor's operations and storm water discharges from both the project site and areas of disturbance outside the project limits during construction. The Contractor shall maintain copies of the Permits at the project site and shall make the Permits available during construction.

Unless arrangements for disturbance or use of areas outside the project limits are made by the Department and made part of the contract, it is expressly agreed that the Department assumes no responsibility for the Contractor or property owner with respect to any arrangements made between the Contractor and property owner. The Contractor shall implement, inspect and maintain all necessary water pollution control practices to satisfy all applicable Federal, State, and Local laws and regulations that govern water quality for areas used outside of the highway right-of-way or areas arranged for the specific use of the Contractor for this project. Installing, inspecting, and maintaining water pollution control practices on areas outside the highway right-of-way not specifically arranged for and provided for by the Department for the execution of this contract will not be paid for.

The Contractor shall be responsible for the costs and for liabilities imposed by law as a result of the Contractor's failure to comply with the provisions set forth in this section "Water Pollution Control (Storm Water Pollution Prevention Plan)", including but not limited to, compliance with the applicable provisions of the Manuals, Permits and Federal, State and local regulations. Costs and liabilities include, but are not limited to, fines, penalties, and damages whether assessed against the State or the Contractor, including those levied under the Federal Clean Water Act and the State Porter Cologne Water Quality Act.

In addition to the remedies authorized by law, money due the Contractor under the contract, in an amount determined by the Department, may be retained by the State of California until disposition has been made of the costs and liabilities.

When a regulatory agency or other third party identifies a failure to comply with the permit or any other local, State, or federal requirement, the Engineer may retain money due the Contractor, subject to the following:

A. The Department will give the Contractor 30 days notice of the Department's intention to retain funds from partial payments which may become due to the Contractor prior to acceptance of the contract. Retention of funds from payments made after acceptance of the contract may be made without prior notice to the Contractor.
B. No retention of additional amounts out of partial payments will be made if the amount to be retained does not exceed the amount being withheld from partial payments pursuant to Section 9-1.06, "Partial Payments," of the Standard Specifications.
C. If the Department has retained funds and it is subsequently determined that the State is not subject to the costs and liabilities in connection with the matter for which the retention was made, the Department shall be liable for interest on the amount retained for the period of the retention. The interest rate payable shall be 6 percent per annum.

Conformance with the provisions of this section "Water Pollution Control (Storm Water Pollution Prevention Plan)" shall not relieve the Contractor from the Contractor's responsibilities, as provided in Section 7, "Legal Relations and Responsibility," of the Standard Specifications.

The Contractor shall notify the Engineer immediately upon request from the regulatory agencies to enter, inspect, sample, monitor or otherwise access the project site or the Contractor's records pertaining to water pollution control work.

STORM WATER POLLUTION PREVENTION PLAN PREPARATION, APPROVAL AND AMENDMENTS

As part of the water pollution control work, a Storm Water Pollution Prevention Plan, hereafter referred to as the "SWPPP," is required for this contract. The SWPPP shall conform to the provisions in Section 7-1.01G, "Water Pollution," of the Standard Specifications, the requirements in the Manuals, the requirements of the Permits, and these special provisions. Upon the Engineer's approval of the SWPPP, the SWPPP shall be considered to fulfill the provisions in Section 7-1.01G, "Water Pollution," of the Standard Specifications for development and submittal of a Water Pollution Control Program.

No work having potential to cause water pollution, as determined by the Engineer, shall be performed until the SWPPP has been approved by the Engineer.

The Contractor shall designate a Water Pollution Control Manager. The Water Pollution Control Manager shall be responsible for the preparation of the SWPPP and any required modifications or amendments and shall be responsible for the implementation and adequate functioning of the various water pollution control practices employed. The Water Pollution Control Manager shall serve as the primary contact for all issues related to the SWPPP or its implementation. The Contractor shall submit to the Engineer a statement of qualifications, describing the training, previous work history and expertise of the individual selected by the Contractor to serve as Water Pollution Control Manager. The Engineer will reject the Contractor’s submission of a Water Pollution Control Manager if the submitted qualifications are deemed to be inadequate.

Within 30 days after the approval of the contract, the Contractor shall submit 3 copies of the draft SWPPP to the Engineer. The Engineer will have 15 days to review the SWPPP. If revisions are required, as determined by the Engineer, the Contractor shall revise and resubmit the SWPPP within 10 days of receipt of the Engineer's comments. The Engineer will have 10 days to review the revisions. Upon the Engineer's approval of the SWPPP, 4 approved copies of the SWPPP, incorporating the required changes, shall be submitted to the Engineer. In order to allow construction activities to proceed, the Engineer may conditionally approve the SWPPP while minor revisions are being completed. If the Engineer does not review or approve the SWPPP within the time specified, compensation will be made in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

The SWPPP shall apply to all areas that are directly related to construction including, but not limited to, staging areas, storage yards, material borrow areas, and access roads within or outside of the highway right-of-way.

The SWPPP shall incorporate water pollution control practices in the following six categories:

A. Soil stabilization;
B. Sediment control;
C. Wind erosion control;
D. Tracking control;
E. Non-storm water control; and
F. Waste management and material pollution control.

The Contractor shall develop a Water Pollution Control Schedule that shall describe the timing of grading or other work activities that could affect water pollution. The Water Pollution Control Schedule shall be updated by the Contractor to reflect any changes in the Contractor's operations that would affect the necessary implementation of water pollution control practices.

The Contractor shall incorporate the "Minimum Requirements" presented in the Preparation Manual into the SWPPP. In addition to the "Minimum Requirements" presented in the Preparation Manual, the Contractor shall complete the BMP Consideration Checklist presented in the Preparation Manual. The Contractor shall identify and incorporate into the SWPPP the water pollution control practices selected by the Contractor or as directed by the Engineer.

In addition to the Minimum Requirements presented in the Preparation Manual, special requirements shall be incorporated into the SWPPP and the Water Pollution Control Cost Break-Down as follows:

Special Requirement(s)

Category	BMP, location and quantity
Soil Stabilization Practices	SS-10 Outlet Protection/Velocity Dissipation Devices, at unfinished but functional drainage outlets, 14 EA SS-11 Slope Drains, as needed to convey runoff from unfinished embankments where there are no finished drainage facilities for concentrated runoff, 36 M
Sediment Control Practices	SC-3 Sediment Trap, at the toe of embankments where additional sediment removal is required, 3 EA SC-8 Sandbag Barrier in unlined drainage swales, at the perimeter of embankments, near drainage outlets and inlets, 54 M
Non Storm Water Control	NS-3 Paving and Grading Operations, Various, Lump Sum
Waste Management & Materials Pollution Control	WM-6 Hazardous Waste Management, Various, Lump Sum

The following contract items of work, shall be incorporated into the SWPPP as "Temporary Water Pollution Control Practices": Temporary Cover, Temporary Concrete Washout Facility, Temporary Entrance/Exit, Temporary Drainage Inlet Protection, Temporary Erosion Control, and Temporary Silt Fence. The Contractor's attention is directed to these special provisions provided for each temporary water pollution control.

The following contract items of work, as shown on the project plans or as specified elsewhere in these special provisions, shall be identified in the SWPPP as permanent water pollution control practices: Fiber Roll, Erosion Control Netting, Erosion Control (Blanket), Column Drain Protection, and Erosion Control (Type D). These permanent water pollution control practices shall be constructed as specified in "Order of Work" of these special provisions, and utilized during the construction period. The Contractor shall maintain and protect the permanent water pollution control practices throughout the duration of the project and shall restore these controls to the lines, grades and condition shown on the plans prior to acceptance of the contract.

The SWPPP shall include, but not be limited to, the items described in the Manuals, Permits, and related information contained in the contract documents.

The Contractor shall prepare an amendment to the SWPPP when there is a change in construction activities or operations which may affect the discharge of pollutants to surface waters, ground waters, municipal storm drain systems, or when the Contractor's activities or operations violate any condition of the Permits, or when directed by the Engineer. Amendments shall show additional water pollution control practices or revised operations, including those areas or operations not shown in the initially approved SWPPP. Amendments to the SWPPP shall be prepared, and submitted for review and approval in the same manner as specified for the SWPPP approval. Subsequent amendments shall be submitted within a time approved by the Engineer, but in no case longer than the time specified for the initial submittal and review of the SWPPP.

The Contractor shall keep one copy of the approved SWPPP and approved amendments at the project site. The SWPPP shall be made available upon request by a representative of the Regional Water Quality Control Board, State Water Resources Control Board, United States Environmental Protection Agency or of the local storm water management agency. Requests by the public shall be directed to the Engineer.

COST BREAK-DOWN

The Contractor shall submit to the Engineer a cost break-down for the contract lump sum item of water pollution control, together with the SWPPP.

The cost break-down shall be completed and furnished in the format shown in the cost break-down example included in this section. Unit descriptions and quantities shall be designated by the Contractor, except for the specified special requirements shown in the example. The units and quantities given in the example, if provided, are special requirements specified for the SWPPP, and shall be included in the cost break-down furnished to the Engineer. The Contractor shall verify the estimated quantities of the special requirements and submit revised quantities in the cost break-down.

The Contractor shall determine the quantities required to complete the work of water pollution control. The quantities and their values shall be included in the cost break-down submitted to the Engineer for approval. The Contractor shall be responsible for the accuracy of the quantities and values used in the cost break-down submitted for approval. The cost break-down shall not include water pollution control practices which are shown on the plans and for which there is a separate contract item.

The sum of the amounts for the work listed in the cost break-down table shall be equal to the contract lump sum price paid for water pollution control. Profit shall be included in each individual item listed in the cost break-down. The cost break-down shall be submitted and approved within the same time specified for the SWPPP. Partial payment for the water pollution control will not be made until the cost break-down is approved, in writing, by the Engineer. Attention is directed to "Time Related Overhead" of these special provisions.

Adjustments in the items of work and quantities listed in the approved cost break-down shall be made when required to address amendments to the SWPPP, except when the adjusted items are paid for as extra work.

No adjustment in compensation will be made to the contract lump sum price paid for water pollution control due to differences between the quantities shown in the approved cost break-down and the quantities required to complete the work as shown on the approved SWPPP. No adjustment in compensation will be made for ordered changes to correct SWPPP work resulting from the Contractor's own operations or from the Contractor's negligence.

The approved cost break-down will be used to determine partial payments during the progress of the work and as the basis for calculating the compensation adjustment for the item of water pollution control due to increases or decreases of quantities ordered by the Engineer. When an ordered change increases or decreases the quantities of an approved cost break-down item, the adjustment in compensation will be determined in the same manner specified for increases and decreases in the quantity of a contract item of work in conformance with the provisions in Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications. If an ordered change requires a new item which is not on the approved cost break-down, the adjustment in compensation will be determined in the same manner specified for extra work in conformance with Section 4-1.03D, "Extra Work," of the Standard Specifications.

If requested by the Contractor and approved by the Engineer, changes to the water pollution control practices listed in the approved cost break-down, including addition of new water pollution control practices, will be allowed. Changes shall be included in the approved amendment of the SWPPP. If the requested changes result in a net cost increase to the lump sum price for water pollution control, an adjustment in compensation will be made without change to the water pollution control item. The net cost increase to the water pollution control item will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications.

WATER POLLUTION CONTROL COST BREAK-DOWN

Contract No. 04-006064

UNIT DESCRIPTION	UNIT	APPROXIMATE QUANTITY	VALUE	AMOUNT
MINIMUM REQUIREMENTS				
SS-1 Scheduling	LS			
SS-2 Preservation of Existing Vegetation	LS			
SC-7 Street Sweeping and Vacuuming	LS			
WE-1 Wind Erosion Control	LS			
NS-6 Illicit Connection/Illegal Discharge Detection And Reporting	LS			
NS-8 Vehicle and Equipment Cleaning	LS			
NS-9 Vehicle and Equipment Fueling	LS			
NS-10 Vehicle and Equipment Maintenance	LS			
WM-1 Material Delivery and Storage	LS			
WM-2 Material Use	LS			
WM-4 Spill Prevention and Control	LS			
WM-5 Solid Waste Management	LS			
WM-9 Sanitary/Septic Waste Management	LS			
SPECIAL REQUIREMENTS				
SC-3 Sediment Trap	EA	3		
SC-8 Sandbag Barrier	M	54		
SS-10 Outlet Protection/Velocity Dissipation Devices	EA	14		
SS-11 Slope Drains	M	36		
NS-3 Paving and Grading Operations	LS	LUMP SUM		
WM-6 Hazardous Waste Management	LS	LUMP SUM		

TOTAL _____

SWPPP IMPLEMENTATION

Upon approval of the SWPPP, the Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting, maintaining, removing, and disposing of the water pollution control practices specified in the SWPPP and in the amendments. Unless otherwise directed by the Engineer, the Contractor's responsibility for SWPPP implementation shall continue throughout any temporary suspension of work ordered in conformance with the provisions in Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications. Requirements for installation, construction, inspection, maintenance, removal, and disposal of water pollution control practices are specified in the Manuals and these special provisions.

If the Contractor or the Engineer identifies a deficiency in any aspect of the implementation of the approved SWPPP or amendments, the deficiency shall be corrected immediately. The deficiency may be corrected at a later date and time if requested by the Contractor and approved by the Engineer in writing, but not later than the onset of precipitation. If the Contractor fails to correct the identified deficiency by the date agreed or prior to the onset of precipitation the project shall be in noncompliance. Attention is directed to Section 5-1.01, "Authority of the Engineer," of the Standard Specifications and the payment sections of these special provisions for possible noncompliance penalties.

If the Contractor fails to conform to the provisions of "Water Pollution Control (Storm Water Pollution Prevention Plan)," the Engineer may order the suspension of construction operations which create water pollution.

Implementation of water pollution control practices may vary by season. The Construction Site BMP Manual and these special provisions shall be followed for control practice selection of year round, rainy season and non-rainy season water pollution control practices.

Year-Round Implementation Requirements

The Contractor shall have a year-round program for implementing, inspecting and maintaining water pollution control practices for wind erosion control, tracking control, non-storm water control, and waste management and materials pollution control.

The National Weather Service weather forecast shall be monitored and used by the Contractor on a daily basis. An alternative weather forecast proposed by the Contractor may be used if approved by the Engineer. If precipitation is predicted, the necessary water pollution control practices shall be deployed prior to the onset of the precipitation.

Disturbed soil areas shall be considered active whenever the soil disturbing activities have occurred, continue to occur or will occur during the ensuing 21 days. Non-active areas shall be protected as prescribed in the Construction Site BMP Manual within 14 days of cessation of soil disturbing activities or prior to the onset of precipitation, whichever occurs first.

In order to provide effective erosion control the Contractor may be directed to apply permanent erosion control in small or multiple units as disturbed soil areas are deemed substantially complete by the Engineer. The Contractor’s attention is directed to "Move-In/Move-Out (Erosion Control)" of these special provisions.

The Contractor shall implement, maintain, and inspect the following temporary sediment control practices on a year-round basis. The listed practices shall remain in place until their use is no longer needed, as determined by the Engineer.

Year-Round Sediment Control Practices	Location used
SC-7 Street Sweeping and Vacuuming	On all public traveled roads
WE-1 Wind Erosion Control	On all unfinished and finished slopes that are untreated and subject to wind erosion

Rainy Season Requirements

Soil stabilization and sediment control practices conforming to the requirements in the Special Requirements and applicable Preparation Manual Minimum Requirements, shall be provided throughout the rainy season, defined as between October 15 and May 15.

An implementation schedule of required soil stabilization and sediment control practices for disturbed soil areas shall be completed no later than 20 days prior to the beginning of each rainy season. The implementation schedule shall identify the soil stabilization and sediment control practices and the dates when the implementation will be 25 percent, 50 percent, and 100 percent complete, respectively. Construction activities beginning during the rainy season shall implement applicable soil stabilization and sediment control practices. The Contractor shall implement soil stabilization and sediment control practices a minimum of 10 days prior to the start of the rainy season.

Throughout the defined rainy season, the active disturbed soil area of the project site shall be not more than 2 hectares. The Engineer may approve, on a case-by-case basis, expansions of the active disturbed soil area limit. Soil stabilization and sediment control materials shall be maintained on site sufficient to protect the unprotected disturbed soil area. A detailed plan for the mobilization of sufficient labor and equipment shall be maintained to deploy the water pollution control practices required to protect the project site prior to the onset of precipitation events.

Non-Rainy Season Requirements

The non-rainy season shall be defined as all days outside the defined rainy season. The Contractor's attention is directed to the Construction Site BMP Manual for soil stabilization and sediment control implementation requirements on disturbed soil areas during the non-rainy season. Disturbed soil areas within the project shall be protected in conformance with the requirements in the Construction Site BMP Manual with an effective combination of soil stabilization and sediment control.

MAINTENANCE

To ensure the proper implementation and functioning of water pollution control practices, the Contractor shall regularly inspect and maintain the construction site for the water pollution control practices identified in the SWPPP. The construction site shall be inspected by the Contractor as follows:

A. Prior to a forecast storm;
B. After a precipitation event which causes site runoff;
C. At 24 hour intervals during extended precipitation events;
D. Routinely, a minimum of once every two weeks outside of the defined rainy season;
E. Routinely, a minimum of once every week during the defined rainy season.

The Contractor shall use the Storm Water Quality Construction Site Inspection Checklist provided in the CSWPPP or an alternative inspection checklist provided by the Engineer. One copy of each site inspection record shall be submitted to the Engineer within 24 hours of completing the inspection.

REPORTING REQUIREMENTS

Report of Discharges, Notices or Orders

If the Contractor identifies any discharge into receiving waters in a manner causing, or potentially causing, a condition of pollution, or if the project receives a written notice or order from any regulatory agency, the Contractor shall immediately inform the Engineer. The Contractor shall submit a written report to the Engineer within 7 days of the discharge event, notice, or order. The report shall include the following information:

A. The date, time, location, nature of the operation, and type of discharge, including the cause or nature of the notice or order.
B. The water pollution control practices deployed before the discharge event, or prior to receiving the notice or order.
C. The date of deployment and type of water pollution control practices deployed after the discharge event, or after receiving the notice, or order, including additional measures installed or planned to reduce or prevent reoccurrence.
D. An implementation and maintenance schedule for any affected water pollution control practices.

Report of First-Time Non-Storm Water Discharge

The Contractor shall notify the Engineer at least 3 days in advance of each first-time non-storm water discharge event, excluding exempted discharges. The Contractor shall notify the Engineer of each different operation causing a non-storm water discharge and shall obtain field approval for each first-time non-storm water discharge. Non-storm water discharges shall be monitored at each first-time occurrence and routinely thereafter.

Annual Certifications

By June 15 of each year, the Contractor shall complete and submit an Annual Construction Activity Certification as contained in the Preparation Manual to the Engineer.

PAYMENT

The contract lump sum price paid for prepare storm water pollution prevention plan shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in developing, preparing, obtaining approval of, revising, and amending the SWPPP, including the sampling and analysis plan, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Attention is directed to Section 9-1.06, "Partial Payments," and Section 9-1.07, "Payment After Acceptance," of the Standard Specifications. Payments for prepare storm water pollution prevention plan will be made as follows:

A. After the SWPPP has been approved by the Engineer, 75 percent of the contract item price for prepare storm water pollution prevention plan will be included in the monthly partial payment estimate; and
B. After acceptance of the contract in conformance with the provisions in Section 7-1.17, "Acceptance of Contract," of the Standard Specifications, payment for the remaining 25 percent of the contract item price for prepare storm water pollution prevention plan will be made in conformance with the provisions in Section 9-1.07.

The contract lump sum price paid for water pollution control shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing, constructing, removing, and disposing of water pollution control practices, including non-storm water and waste management and materials pollution water pollution control practices, except those shown on the plans and for which there is a contract item of work, and except developing, preparing, obtaining approval of, revising, and amending the SWPPP, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Storm water sampling and analysis will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications.

The cost of maintaining the temporary water pollution control practices shall be divided equally by the State and the Contractor as follows:

Soil Stabilization

All temporary water pollution control practices except:
SS-1 Scheduling
SS-2 Preservation of Existing Vegetation
Temporary Cover
Temporary Erosion Control

Sediment Control

All temporary water pollution control practices except:
Temporary Drainage Inlet Protection
Temporary Silt Fence

Tracking Control

All temporary water pollution control practices except:
SC-7 Street Sweeping and Vacuuming
Temporary Entrance/Exit

Wind Erosion Control

All temporary water pollution control practices.

Non-Storm Water Control

No sharing of maintenance costs will be allowed.

Waste Management & Material Control

No sharing of maintenance costs will be allowed.

The division of cost will be made by determining the cost of maintaining temporary water pollution control practices in conformance with the provisions in Section 9-1.03, "Force Account Payment," of the Standard Specifications and paying to the Contractor one-half of that cost. Clean-up, repair, removal, disposal, improper installation, and replacement of temporary water pollution control practices damaged by the Contractor's negligence shall not be considered as included in the cost for performing maintenance.

The provisions for sharing maintenance costs shall not relieve the Contractor from the responsibility for providing appropriate maintenance on items with no shared maintenance costs.

Full compensation for non-shared maintenance costs of water pollution control practices, as specified in these special provisions, shall be considered as included in the contract lump sum price paid for water pollution control and no additional compensation will be allowed therefor.

Water pollution control practices which are shown on the plans and for which there is a contract item of work will be measured and paid for as that contract item of work.

The Engineer will retain an amount equal to 25 percent of the estimated value of the contract work performed during periods in which the Contractor fails to conform to the provisions in this section "Water Pollution Control (Storm Water Pollution Prevention Plan)," as determined by the Engineer.

Retention for failure to conform to the provisions in this section "Water Pollution Control (Storm Water Pollution Prevention Plan)" shall be in addition to the other retention amounts required for the contract. The amounts retained for the Contractor's failure to conform to provisions in this section will be released for payment on the next monthly estimate for partial payment following the date when an approved SWPPP has been implemented and maintained, and when water pollution has been adequately controlled, as determined by the Engineer.

10-1.21 MOBILIZATION

Mobilization shall conform to the provisions in Section 11, "Mobilization," of the Standard Specifications and these special provisions.

The Contractor may construct access trestles on the northern shore of the Carquinez Strait in accordance with the permits obtained by the State and these special provisions.

The Contractor shall submit to the Resident Engineer's Office at 4585 Pacheco Blvd., Suite 200, Martinez, California 94553 in accordance with the provisions in Section 5-1.01, "Plans and Working Drawings," calculations and working drawings of any access trestle(s) that are constructed. Six sets of such plans, manuals and drawings shall be submitted to the said Office for use during construction. The working drawings and calculations shall be signed by a civil engineer registered in the State of California.

The access trestles shall also conform to the following requirements:

A. Piling shall not be creosoted.
B. The number of piling and the total cross sectional area of the piling shall not exceed the requirements listed in the permits the State has obtained for this project.
C. Piling used to construct the access trestles shall be completely removed, except in the brackish marsh where piles shall be cut 1.0 meter below the mudline after no longer needed for construction.
D. The shadow area of the trestles (plan view area) shall not exceed the limits listed in the permits the State has obtained for this project.
E. Pile driving for the access trestles construction in waters less than 3m deep below MLLW, shall only be allowed during the periods of December 1, 2001 through March 31, 2002 and of July 1 through October 31 of each construction year.
F. Superstructure construction of the access trestles shall be achieved by means that do not disturb the mudline except as allowed during the periods of December 1, 2001 through March 31, 2002 and of July 1 through October 31 of each construction year.

When access trestles are no longer needed, any piles installed by the Contractor for the access trestles shall be extracted except in the brackish marsh where piles shall be cut 1.0 meter below the mudline and shall become the property of the Contractor and shall be disposed of outside the highway right of way in accordance with the provisions in Section 7-1.13 of the Standard Specifications.

Full compensation for conforming to the requirements specified in this section and constructing access trestles, shall be considered as included in the lump sum price paid for mobilization and no additional compensation will be allowed therefore.

10-1.295 TEMPORARY SHORING

A temporary shoring may be constructed at the Contractor's option to provide additional area for falsework support.

The Contractor shall submit to the Engineer, for approval, working drawings and design calculations for the proposed temporary shoring at 3.6 m Rt. BS 6+00 to 3.6 m Rt. BS 7+45. Such drawings and design calculations shall be signed by an engineer who is registered as a Civil Engineer in the State of California. Six sets of the drawings and one copy of the design calculations shall be furnished. The drawings shall be submitted at least 8 weeks in advance of the time the Contractor begins construction of the temporary shoring.

Attention is directed to Section 5-1.02, "Plans and Working Drawings" of the Standard Specifications. Working drawings for the temporary shoring shall include, but not be limited to:

1. Descriptions and values of all loads
2. Stress sheets
3. Shop details
4. Erection and removal plans
5. Equipment lists
6. Other details as necessary

The Contractor shall allow 8 weeks after complete drawings and all support data are submitted to the Engineer for the review of any temporary shoring plans.

The Contractor may revise approved temporary shoring drawings provided sufficient time is allowed for the Engineer's approval before construction begins on the revised portions. Such additional time will not be more than that which was originally allowed. Construction of the temporary shoring shall not begin until the drawings for the temporary shoring have been approved by the Engineer.

The existing slope behind the temporary shoring shall remain the same.

After the adjacent construction activity has been completed and the temporary shoring is no longer needed to allow additional area for falsework support for equipment, the Contractor shall remove the temporary shoring and restore the contour to its original slope.

The contract lump sum price paid for temporary shoring shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the temporary shoring and inspection elements, including earthwork, piles, footings, and drainage systems, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions and as directed by the Engineer.

Full compensation for revisions to the barrier support, drainage system, or other facilities made necessary by the use of a temporary shoring shall be considered as included in the contract lump sum price for temporary shoring and no separate payment will be made therefor.

10-1.495 TEST BORINGS

Test borings shall consist of drilling test borings, taking samples, logging borings and furnishing test boring submittals to the Engineer.

Attention is directed to the "Order of Work," elsewhere in these special provisions.

The "Soil and Rock Logging Classification Manual" is included in the "Information Handout" available to the Contractor in conformance with the provisions in Section 2-1.03, "Examination of Plans, Specifications, Contract, and Site of Work," of the Standard Specifications.

The Contractor shall drill test borings at the center either pile at bents 20 and 21, bridge 23-0215R and at the center of the pile at bents 20 and 21, bridge 23-0212G. .

The Contractor shall notify the Engineer in writing not less than 10 working days in advance of drilling test borings.

All test borings shall be made under the site supervision of, the log of test borings stamped by, and the test boring submittal signed by a Geologist or Civil Engineer who is registered in the State of California and has at least 5 years of geotechnical engineering experience of deep foundations in both soil and rock.

Test borings shall be made by rotary drill methods and shall be at least 76 mm in diameter.

Test borings shall be drilled to a depth at least 6 m below the specified tip elevation for a given pile location.

Standard Penetration Tests (SPT) shall be made in all soil types and performed in conformance with the requirements in ASTM Designation: D1586 in each test boring at 1.5-m maximum intervals and terminate when bedrock is encountered. Soil classification and descriptions shall conform to the requirements for visual-manual procedures in ASTM Designation: D2488.

Bedrock shall be continuously cored with at least 90 percent core recovery. Rock shall not be logged from drill cuttings. Rock quality designation (RQD) shall be made taken at 1.5-m maximum intervals. Rock shall be cored using an outer and inner core barrel drilling system. The outer core barrel shall be fitted with either a diamond impregnated or polycrystalline drill bit and have an outside diameter of at least 76 mm. The split inner tube core barrel shall have an inside diameter of at least 50 mm.

Prior to removal from the split inner tube barrels and placement into core boxes, rock cores shall be photographed. After core boxes are filled, and prior to removal from the drilling platform, rock cores shall be photographed. All rock core photographs shall be color, 127 mm x 178 mm, and labeled with the borehole number, sample elevation, scale, and date and time photographed.

The rock cores shall be retained in rock core boxes that are labeled with the job contract number, the pile location, and the sample elevation. Rock core boxes shall be stored on or near the job site at a location approved by the Engineer. The Contractor shall preserve and secure the rock core samples in a weather protected facility until notified by the Engineer. The Engineer will instruct the Contractor to dispose of the rock core samples in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications, or the Engineer will instruct the Contractor to transport the rock core samples to Translab at 5900 Folsom Boulevard, Sacramento, CA 95819.

The log of test borings including the soil and rock classification shall conform to the document "Soil and Rock Logging Classification Manual: Field Manual," published by the Engineering Service Center, Caltrans, dated August 1995.

After completion of all test borings, the Contractor shall furnish to the Office of Structure Design (OSD), in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications, a test boring submittal that includes rock cores, photographs of rock cores, a test boring report and the log of test borings.

All log of test borings shall be 559 mm x 864 mm in size. For initial review, 4 sets of drawings shall be submitted. Within 3 weeks after final approval of the test boring submittal, one set of the corrected prints on 90-g/m^2 (minimum) good quality bond paper, 559 mm x 864 mm in size, prepared by the Contractor shall be furnished to OSD.

Log of test borings shall show the State assigned designations for the contract number, bridge number, full name of the structure as shown on the contract plans, and District-County-Route-Post mile on each sheet. The test boring/geotechnical subcontractor name, address, and phone number shall be shown on the working drawings. Each sheet shall be numbered in the lower right hand corner and shall contain a blank space in the upper right hand corner for future contract sheet numbers.

The following shall be shown on the log of test borings:

A. Stationing and offset of boring.
B. Northing and easting coordinates.
C. Reference elevation and datum.
D. Boring start and completion date.
E. Geotechnical notes and miscellaneous explanations.
F. Drill bit and sampler types and diameters.
G. Percent of core recovery and RQD.
H. Sample numbers.
I. SPT data.
J. Depth increments of borings.
K. Graphic log.
L. Soil classifications and descriptions.
M. Rock classifications and descriptions.
N. Log symbol legend.
O. Signature and seal of the Geologist or Civil Engineer.

The test boring report shall include the following:

A. Summary of drilling methods, drilling equipment, drill platforms, and any drilling difficulties encountered.
B. Location map of the surveyed position of the test borings relative to the existing pier and to the new pile locations (in California Coordinate System and bridge stationing).
C. Bore hole surveying notes.
D. Photographs of rock cores.
E. Copies of original daily drilling notes.

The Engineer will notify the Contractor in writing when a test boring submittal is complete and approved.

Within 15 working days of approving in writing the complete test boring submittal, the Engineer will supply the Contractor with written confirmation of, or revisions to, specified pile tip elevations shown on the plans. Steel pipe piling, permanent steel casing, micropiling, and filled and unfilled steel casing shall not be fabricated or manufactured to length until written confirmation of, or revisions to, the specified pile tip elevations have been supplied by the Engineer. Should the Engineer fail to supply confirmation of or revision to specified pile tip elevations within the time specified and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of this delay, an extension of time commensurate with the delay in completion of the work thus caused will be granted in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

All materials utilized in making test boring shall be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Full compensation for test borings shall be considered as included in the contract price paid per meter for various contract items for the different types of cast-in-drilled-hole concrete piling listed in the Engineer's Estimate, and no separate payment will be allowed therefore.

ENGINEER'S ESTIMATE
04-006064

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21 (S)	128650	PORTABLE CHANGEABLE MESSAGE SIGN	EA	12		
22	129000	TEMPORARY RAILING (TYPE K)	M	11 400		
23	129100	TEMPORARY CRASH CUSHION MODULE	EA	340		
24	150206	ABANDON CULVERT	M	220		
25	022176	ABANDON CORRUGATED STEEL PIPE	EA	1		
26	150221	ABANDON INLET	EA	5		
27	022177	ABANDON WATER PIPELINE	EA	4		
28	150241	ABANDON SEWER	EA	1		
29	150305	OBLITERATE SURFACING	M2	7210		
30	150608	REMOVE CHAIN LINK FENCE	M	2130		
31	150662	REMOVE METAL BEAM GUARD RAILING	M	1210		
32	150711	REMOVE PAINTED TRAFFIC STRIPE	M	11 600		
33	022178	REMOVE YELLOW PAINTED TRAFFIC STRIPE	M	7490		
34	150714	REMOVE THERMOPLASTIC TRAFFIC STRIPE	M	7550		
35	022179	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE	M	6230		
36	150722	REMOVE PAVEMENT MARKER	EA	3360		
37	150744	REMOVE ROADSIDE SIGN (WOOD POST)	EA	28		
38	150747	REMOVE ROADSIDE SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	2		
39	150760	REMOVE SIGN STRUCTURE	EA	5		
40	150769	REMOVE ASPHALT CONCRETE	M3	530		

ENGINEER'S ESTIMATE
04-006064

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41	150801	REMOVE OVERSIDE DRAIN	M	140		
42	150805	REMOVE CULVERT	M	160		
43	022180	REMOVE PIPE (HORIZONTAL DRAIN)	M	830		
44	022181	CLEAN 700 MM DRAINAGE FACILITY	EA	1		
45	022182	CLEAN 450 MM DRAINAGE FACILITY	EA	1		
46	022183	STORM DRAIN VIDEO SURVEY	EA	2		
47	150820	REMOVE INLET	EA	11		
48	150821	REMOVE HEADWALL	EA	3		
49	150824	REMOVE SEWER MANHOLE	EA	1		
50	150828	REMOVE JUNCTION BOX	EA	1		
51	022184	REMOVE CONCRETE BOX	EA	1		
52 (S)	152351	RELOCATE HYDRANT	EA	1		
53 (S)	152410	RELOCATE WATER METER	EA	1		
54 (S)	022185	PLANE ASPHALT CONCRETE PAVEMENT (84 MM MAX)	M2	97		
55 (S)	022186	PLANE ASPHALT CONCRETE PAVEMENT (99 MM MAX)	M2	310		
56 (S)	022187	PLANE ASPHALT CONCRETE PAVEMENT (60 MM MAX)	M2	650		
57	153210	REMOVE CONCRETE	M3	180		
58	153221	REMOVE CONCRETE BARRIER	M	1090		
59	155003	CAP INLET	EA	7		
60	155006	CAP RISER	EA	1		

ENGINEER'S ESTIMATE
04-006064

Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	156590	REMOVE CRASH CUSHION (SAND FILLED)	EA	1		
62	157561	BRIDGE REMOVAL (PORTION), LOCATION A	LS	LUMP SUM	LUMP SUM	
63	157562	BRIDGE REMOVAL (PORTION), LOCATION B	LS	LUMP SUM	LUMP SUM	
64	158100	SALVAGE CRASH CUSHION	EA	1		
65	160101	CLEARING AND GRUBBING	LS	LUMP SUM	LUMP SUM	
66	190101	ROADWAY EXCAVATION	M3	227 000		
67 (F)	192003	STRUCTURE EXCAVATION (BRIDGE)	M3	3735		
68 (F)	048683	STRUCTURE EXCAVATION (TYPE D-LDR)	M3	200		
69 (F)	048684	STRUCTURE EXCAVATION (TYPE D) (HAZARDOUS)	M3	1425		
70 (F)	192020	STRUCTURE EXCAVATION (TYPE D)	M3	1480		
71 (F)	192037	STRUCTURE EXCAVATION (RETAINING WALL)	M3	7165		
72 (F)	193003	STRUCTURE BACKFILL (BRIDGE)	M3	2855		
73 (F)	193013	STRUCTURE BACKFILL (RETAINING WALL)	M3	5095		
74 (F)	193031	PERVIOUS BACKFILL MATERIAL (RETAINING WALL)	M3	325		
75	193114	SAND BACKFILL	M3	51		
76	194001	DITCH EXCAVATION	M3	170		
77 (F)	197021	EARTH RETAINING STRUCTURE, LOCATION A	M2	600		
78 (F)	197022	EARTH RETAINING STRUCTURE, LOCATION B	M2	310		
79	022188	GEOSYNTHETIC REINFORCED EMBANKMENT	M2	230		
80	022189	IMPORTED BORROW (GEOSYNTHETIC REINFORCED EMBANKMENT)	M3	750		

ENGINEER'S ESTIMATE
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Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81	203001	EROSION CONTROL (BLANKET)	M2	2990		
82	022190	EROSION CONTROL (NETTING)	M2	5690		
83	203003	STRAW (EROSION CONTROL)	TONN	48		
84	203014	FIBER (EROSION CONTROL)	KG	7530		
85	203021	FIBER ROLLS	M	14 000		
86	022191	COLUMN DRAIN PROTECTION	EA	14		
87	203024	COMPOST (EROSION CONTROL)	KG	22 900		
88	203026	MOVE IN OR MOVE OUT (EROSION CONTROL)	EA	7		
89	022192	MOVE IN/OUT (TEMPORARY EROSION CONTROL)	EA	5		
90	022193	PURE LIVE SEED (TYPE 1) (EROSION CONTROL)	KG	710		
91	022194	PURE LIVE SEED (TYPE 2) (EROSION CONTROL)	KG	17		
92	203056	COMMERCIAL FERTILIZER (EROSION CONTROL)	KG	2460		
93	203061	STABILIZING EMULSION (EROSION CONTROL)	KG	1680		
94	250401	CLASS 4 AGGREGATE SUBBASE	M3	12 600		
95	260210	AGGREGATE BASE (APPROACH SLAB)	M3	19		
96	260301	CLASS 3 AGGREGATE BASE	M3	10 400		
97	290211	ASPHALT TREATED PERMEABLE BASE	M3	2830		
98	390155	ASPHALT CONCRETE (TYPE A)	TONN	37 000		
99	394002	PLACE ASPHALT CONCRETE (MISCELLANEOUS AREA)	M2	2220		
100	394040	PLACE ASPHALT CONCRETE DIKE (TYPE A)	M	3040		

ENGINEER'S ESTIMATE
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Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
101	394044	PLACE ASPHALT CONCRETE DIKE (TYPE C)	M	870		
102	394048	PLACE ASPHALT CONCRETE DIKE (TYPE E)	M	125		
103	394049	PLACE ASPHALT CONCRETE DIKE (TYPE F)	M	1230		
104	395001	LIQUID ASPHALT, SC-70 (PRIME COAT)	TONN	60		
105	397001	ASPHALTIC EMULSION (PAINT BINDER)	TONN	3.4		
106	490511	FURNISH STEEL PILING (HP 250 X 85)	M	455		
107 (S)	490512	DRIVE STEEL PILE (HP 250 X 85)	EA	50		
108 (S)	048685	INSTALL SEISMIC MONITORING CASING	M	45		
109 (S)	490657	600 MM CAST-IN-DRILLED-HOLE CONCRETE PILING	M	1476		
110	048686	600 MM CAST-IN-DRILLED-HOLE CONCRETE (ROCK SOCKET) PILING	M	365		
111 (S)	490661	1.2 M CAST-IN-DRILLED-HOLE CONCRETE PILING	M	20		
112 (S)	048687	1.5 M CAST-IN-DRILLED-HOLE CONCRETE (ROCK SOCKET) PILING	M	618		
113 (S)	048688	1.83 M CAST-IN-DRILLED-HOLE CONCRETE PILING	M	980		
114 (S)	048689	2.4 M CAST-IN-DRILLED-HOLE CONCRETE (ROCK SOCKET) PILING	M	37		
115	048690	3.05 M CAST-IN-DRILLED-HOLE CONCRETE PILING	M	55		
116 (S)	048691	3.05 M CAST-IN-DRILLED-HOLE CONCRETE (ROCK SOCKET) PILING	M	24		
117	490674	4.0 M CAST-IN-DRILLED-HOLE CONCRETE PILING	M	25		
118 (S)	048692	3.66 M CAST-IN-DRILLED-HOLE CONCRETE PILING	M	15		
119 (S)	048693	3.35 M CAST-IN-DRILLED HOLE CONCRETE (ROCK SOCKET) PILING	M	11		
120 (S)	048694	4.0 M CAST-IN-DRILLED-HOLE CONCRETE (ROCK SOCKET) PILING	M	135		

ENGINEER'S ESTIMATE
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Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
121	048695	2.5 M CAST-IN-DRILLED-HOLE CONCRETE (ROCK SOCKET) PILING	M	75		
122 (S)	048696	1.83 M PERMANENT CASING	M	986		
123 (S)	048697	3.05 M PERMANENT CASING	M	65		
124 (S)	048698	3.66 M PERMANENT CASING	M	15		
125 (S)	500010	PRESTRESSING	LS	LUMP SUM	LUMP SUM	
126 (F)	510051	STRUCTURAL CONCRETE, BRIDGE FOOTING	M3	2333		
127 (F)	510053	STRUCTURAL CONCRETE, BRIDGE	M3	13 635		
128 (F)	510060	STRUCTURAL CONCRETE, RETAINING WALL	M3	1576		
129 (F)	510086	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N)	M3	326		
130	510087	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	M3	69		
131	510135	CLASS 2 CONCRETE (HEADWALL)	M3	9		
132 (F)	510502	MINOR CONCRETE (MINOR STRUCTURE)	M3	275		
133	510522	MINOR CONCRETE (PIPE COVER)	M3	5		
134	510526	MINOR CONCRETE (BACKFILL)	M3	19		
135 (F)	048699	SAND LIGHTWEIGHT CONCRETE	M3	8400		
136 (F)	048835	ARCHITECTURAL TEXTURE	M2	1251		
137	511106	DRILL AND BOND DOWEL	M	51		
138 (S)	512231	FURNISH PRECAST PRESTRESSED CONCRETE GIRDER (15 M - 20 M)	EA	8		
139 (S)	512500	ERECT PRECAST PRESTRESSED CONCRETE GIRDER	EA	8		
140 (S)	518050	PTFE BEARING	EA	14		

ENGINEER'S ESTIMATE
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Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
141	519010	NEOPRENE STRIP	M2	53		
142 (S)	519121	JOINT SEAL (TYPE B - MR 30 MM)	M	42		
143 (S)	519123	JOINT SEAL (TYPE B - MR 50 MM)	M	37		
144 (S)	519129	JOINT SEAL ASSEMBLY (MR 101 MM - 160 MM)	M	33		
145	519130	JOINT SEAL ASSEMBLY (MR 161 MM - 240 MM)	M	11		
146 (S)	519131	JOINT SEAL ASSEMBLY (MR 241 MM - 320 MM)	M	48		
147 (S)	048700	JOINT SEAL ASSEMBLY (MR 800 MM)	M	31		
148 (S)	048701	JOINT SEAL ASSEMBLY (MR 980 MM)	M	18		
149 (S-F)	520102	BAR REINFORCING STEEL (BRIDGE)	KG	5 502 700		
150 (F)	520103	BAR REINFORCING STEEL (RETAINING WALL)	KG	238 890		
151 (S-F)	048702	WELDED HEADED BAR REINFORCING	EA	41 778		
152 (S)	022195	BAR REINFORCING STEEL (HEAD WALL)	KG	181		
153 (F)	540101	ASPHALT MEMBRANE WATERPROOFING	M2	49		
154	560218	FURNISH SIGN STRUCTURE (TRUSS)	KG	45 046		
155 (S)	560219	INSTALL SIGN STRUCTURE (TRUSS)	KG	45 046		
156	561008	760 MM CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	M	45		
157	561009	920 MM CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	M	17		
158	562004	METAL (RAIL MOUNTED SIGN)	KG	350		
159	566011	ROADSIDE SIGN - ONE POST	EA	7		
160	566012	ROADSIDE SIGN - TWO POST	EA	7		

ENGINEER'S ESTIMATE
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Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
201 (S)	022203	AIR RELEASE VALVE	EA	1		
202 (S)	022204	BLOW-OFF ASSEMBLY	EA	1		
203 (S)	022205	150 MM DUCTILE IRON WATER PIPE	M	10		
204 (S)	022206	200 MM DUCTILE IRON WATER PIPE	M	350		
205	022207	200 MM DUCTILE IRON SEWER PIPE	M	38		
206 (S)	022208	300 MM DUCTILE IRON WATER PIPE	M	16		
207 (S)	022209	600 MM DUCTILE IRON WATER PIPE	M	120		
208 (S)	719190	SEWER MANHOLE FRAME AND COVER	EA	1		
209 (S)	719200	SEWER MANHOLE	EA	1		
210	721008	ROCK SLOPE PROTECTION (LIGHT, METHOD B)	M3	180		
211	721009	ROCK SLOPE PROTECTION (FACING, METHOD B)	M3	13		
212	721011	ROCK SLOPE PROTECTION (BACKING NO. 2, METHOD B)	M3	170		
213	721024	ROCK SLOPE PROTECTION (1/4T, METHOD B)	M3	300		
214	721420	CONCRETE (DITCH LINING)	M3	59		
215	729010	ROCK SLOPE PROTECTION FABRIC	M2	840		
216	731502	MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)	M3	38		
217 (S)	750001	MISCELLANEOUS IRON AND STEEL	KG	21 100		
218 (S-F)	750496	MISCELLANEOUS METAL (RESTRAINER - PIPE TYPE)	KG	10 000		
219 (S-F)	750499	MISCELLANEOUS METAL (RESTRAINER - ROD TYPE)	KG	15 600		
220 (S-F)	750501	MISCELLANEOUS METAL (BRIDGE)	KG	38 250		

ENGINEER'S ESTIMATE
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Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
221 (S)	750505	BRIDGE DECK DRAINAGE SYSTEM	KG	43 100		
222 (S)	800382	CHAIN LINK FENCE (TYPE CL-0.9, VINYL-CLAD)	M	74		
223 (S)	800391	CHAIN LINK FENCE (TYPE CL-1.8)	M	1980		
224	802595	3.0 M CHAIN LINK GATE (TYPE CL-1.8)	EA	1		
225	820107	DELINEATOR (CLASS 1)	EA	14		
226	820118	GUARD RAILING DELINEATOR	EA	37		
227	022210	CONCRETE BARRIER MARKER	EA	62		
228 (S)	832003	METAL BEAM GUARD RAILING (WOOD POST)	M	1730		
229 (S-F)	833020	CHAIN LINK RAILING	M	404		
230	833080	CONCRETE BARRIER (TYPE K)	M	1670		
231 (F)	833125	CONCRETE BARRIER (TYPE 25)	M	2438		
232 (F)	833128	CONCRETE BARRIER (TYPE 25 MODIFIED)	M	1414		
233 (S)	839311	DOUBLE THRIE BEAM BARRIER (WOOD POST)	M	310		
234 (S-F)	839521	CABLE RAILING	M	29		
235 (S)	839565	TERMINAL SYSTEM (TYPE SRT)	EA	9		
236 (S)	839568	TERMINAL ANCHOR ASSEMBLY (TYPE SFT)	EA	6		
237 (S)	839569	TERMINAL ANCHOR ASSEMBLY (TYPE CA)	EA	3		
238 (S)	839570	RETURN SECTION	EA	3		
239 (S)	839591	CRASH CUSHION, SAND FILLED	EA	7		
240	839701	CONCRETE BARRIER (TYPE 60)	M	140		

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Item	Item Code	Item	Unit of Measure	Estimated Quantity	Unit Price	Item Total
301 (S)	022258	PIER STAIRWAY LIGHTING (PIER 13 THRU 15)	LS	LUMP SUM	LUMP SUM	
302 (S)	022259	MARINE NAVIGATIONAL AIDS SYSTEM	LS	LUMP SUM	LUMP SUM	
303 (S)	022260	NORTH APPROACH SUBSTATION	LS	LUMP SUM	LUMP SUM	
304 (S)	022261	CABLE TRAY LAYOUT	LS	LUMP SUM	LUMP SUM	
305 (S)	022262	PIER 3 SUBSTATION	LS	LUMP SUM	LUMP SUM	
306 (S)	022263	NEW TOLL PLAZA SUBSTATION	LS	LUMP SUM	LUMP SUM	
307 (S)	022264	SUPERVISOR CONTROL AND DATA ACQUISITION SYSTEM	LS	LUMP SUM	LUMP SUM	
308 (S)	048706	SEISMIC MONITORING ELECTRICAL SYSTEM	LS	LUMP SUM	LUMP SUM	
309 (S)	994650	BUILDING WORK	LS	LUMP SUM	LUMP SUM	
310	BLANK					
311	072008	TEMPORARY SHORING	LS	LUMP SUM	LUMP SUM	
312	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID: _____